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U.S. Department of Energy
Idaho Operations Office

INL Sitewide Operations and Maintenance Plan for CERCLA Response Actions

May 2006

Idaho Cleanup Project

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May 2006

Prepared for the
U.S. Department of Energy
DOE Idaho Operations Office

ABSTRACT

This Sitewide Operations and Maintenance Plan documents how remedies mandated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) are operated and maintained at the Idaho National Laboratory (INL) Site. The Records of Decision have mandated specific activities to ensure that the selected remedies remain protective of human health and the environment after the remedial activities are completed. In some cases, operations and maintenance activities have been specified for CERCLA sites during the pre-remediation phase. Therefore, this plan includes pre- and post-remediation operations and maintenance activities.

The waste area group-specific operations and maintenance plans formerly in place at the INL Site are integrated in this Sitewide Operations and Maintenance Plan. This Sitewide Operations and Maintenance Plan is being updated as remediation activities are completed and as the U.S. Department of Energy Idaho Operations Office assumes control of additional areas at the INL Site.

The *Idaho National Engineering and Environmental Laboratory Comprehensive Facility and Land Use Plan* supports this plan by providing current and projected facility and land uses and by listing the CERCLA sites at the INL Site. This reference information is available electronically at http://cflup.inel.gov.

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ACRONYMS

ARA	Auxiliary Reactor Area
ARVFS	Army Reentry Vehicle Facility Site
BORAX-I	Boiling Water Reactor Experiment I
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFA	Central Facilities Area
DEQ	[Idaho] Department of Environmental Quality
DOE	U.S. Department of Energy
DOE-ID	U.S. Department of Energy Idaho Operations Office
EBR	Experimental Breeder Reactor
EDMS	Electronic Document Management System
EPA	U.S. Environmental Protection Agency
ICDF	Idaho CERCLA Disposal Facility
INL	Idaho National Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
NPAT	neutron probe access tube
O&M	operations and maintenance
OU	operable unit
PBF	Power Burst Facility
ROD	Record of Decision
RTC	Reactor Technology Complex
RWMC	Radioactive Waste Management Complex
SCA	soil contamination area
SDA	Subsurface Disposal Area
SL-1	Stationary Low-Power Reactor No. 1
TDR	time-domain reflectometer
TRA	Test Reactor Area
TSF	Technical Support Facility

USC	*United States Code*
USGS	United States Geological Survey
WAG	waste area group
WRRTF	Water Reactor Research Test Facility

INL Sitewide Operation and Maintenance Plan for CERCLA Response Actions

1. INTRODUCTION/PURPOSE

This plan documents how remedies mandated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC § 9601 et seq.) are operated and maintained at the Idaho National Laboratory (INL) Site. Various Records of Decision (RODs) and comprehensive RODs have mandated specific activities to ensure that the remedies remain protective of human health and the environment after the remedial activities are completed. For the purposes of this plan, remedial activities are considered complete when the remedial actions have been implemented and the remedial action report has been completed and approved by the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and the Idaho Department of Environmental Quality (DEQ). In some cases, operations and maintenance (O&M) activities have been specified for CERCLA sites during the pre-remediation phase. Therefore, this plan includes pre- and post-remediation O&M activities.

The activities addressed in waste area group (WAG) -specific O&M plans formerly in place at the INL Site are compiled in this plan. This plan excludes day-to-day facility operations such as transportation of waste to the Idaho CERCLA Disposal Facility (ICDF). Instead, this plan focuses on O&M activities that are in place to address the protectiveness and integrity of CERCLA remedial measures at the INL Site. Examples of such activities are inspection of and reporting on the condition of engineered barriers and performance of radiological surveys.

This Sitewide O&M Plan pertains to operable units (OUs) that are under the direct control of the U.S. Department of Energy Idaho Operations Office (DOE-ID). Therefore, this plan excludes WAG 8, the Naval Reactors Facility. Refer to Figure 1 for a map of the WAGs at the INL Site.

The revision of this plan reflects changes that have occurred resulting from completion of remedies across the INL Site and the recommendations resulting from the recent 5-year review. This plan will be revised again as O&M requirements change, and the frequency and extent of O&M activities will be reevaluated during future 5-year reviews. The O&M activities might be revised or terminated after a 5-year review and with the approval of the EPA, DEQ, and DOE (i.e., the Agencies).

The *Idaho National Engineering and Environmental Laboratory Comprehensive Facility and Land Use Plan* (DOE-ID 1997a) is used as a reference to support this plan by providing current and projected facility and land uses and by listing the CERCLA sites at the INL Site. The reference information is available electronically at http://cflup.inel.gov.

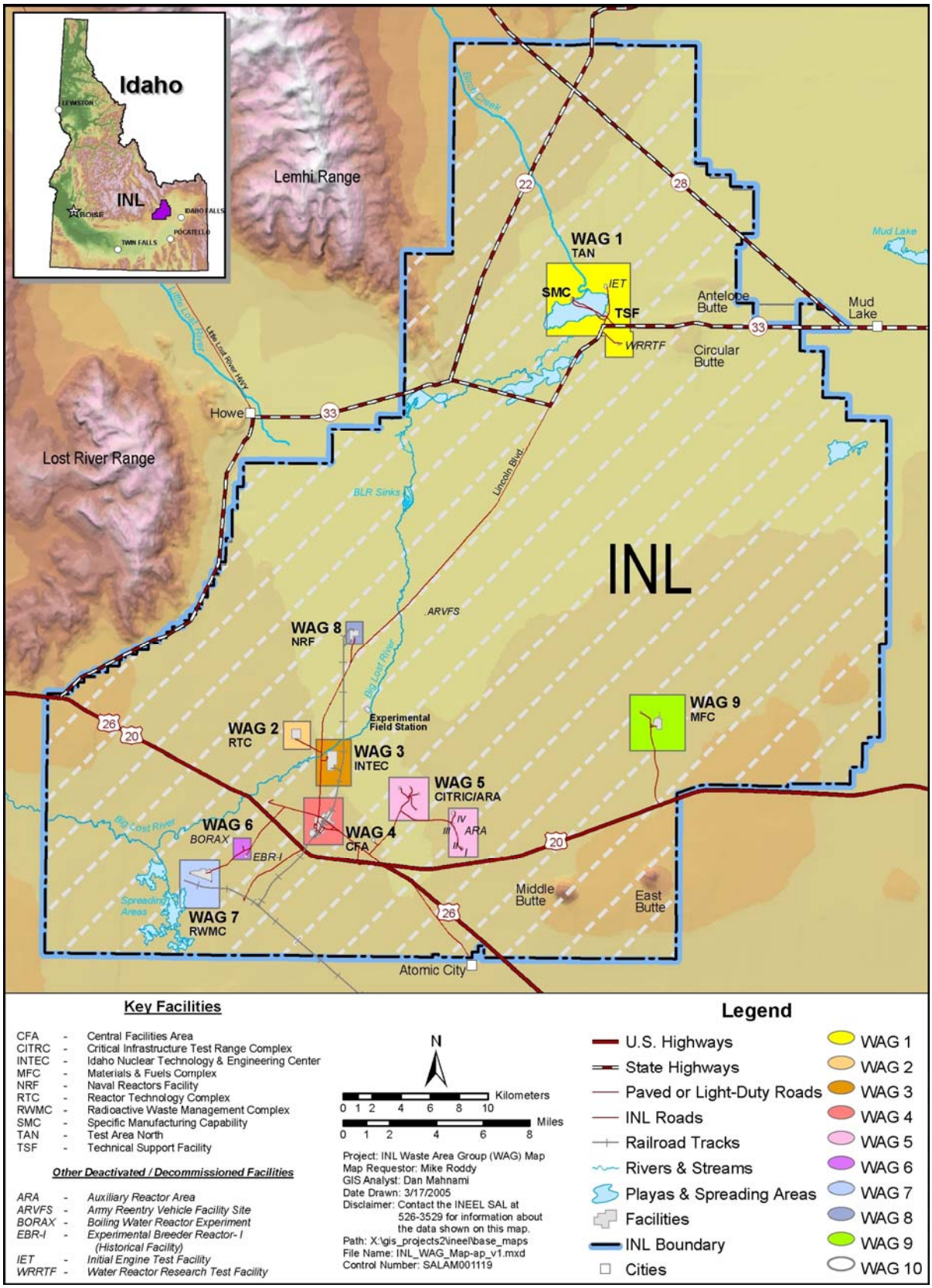

Figure 1. Idaho National Laboratory Site map showing the waste area group locations.

2. OPERATIONS AND MAINTENANCE ACTIVITIES AT THE IDAHO NATIONAL LABORATORY SITE

The O&M activities at the INL Site have been developed for specific WAGs and are described in specific decision documents and O&M plans. The following subsections contain the reference documents for each WAG and list specific O&M tasks with performance frequencies. The appendixes of this plan contain WAG-specific O&M inspection log forms and maps that are used to assist the inspectors in performing and documenting the O&M inspections.

The Long-Term Stewardship organization provides qualified personnel to perform and report the O&M activities described in this plan unless noted otherwise. Personnel must be trained on the requirements of the approved plan prior to performing O&M activities. The O&M activities are performed and reported annually unless noted otherwise. The timing of O&M inspections is coordinated with the annual inspection of institutional controls, when possible, in order to avoid duplication of visits. Reporting of the inspections and maintenance activities is compiled annually as an INL-wide report. Inspection records, photographs, and other documentation are stored in the Electronic Document Management System (EDMS) at the INL Site.

2.1 Waste Area Group 1, Test Area North

The following decision documents apply to WAG 1, Test Area North:

- *Record of Decision Declaration for the Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites Final Remedial Action* (DOE-ID 1995a)

- *Explanation of Significant Differences from the Record of Decision for the Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites, Final Remedial Action* (INEEL 1997)

- *Final Record of Decision for Test Area North Operable Unit 1-10* (DOE-ID 1999a)

- *Record of Decision Amendment Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites, Final Remedial Action* (DOE-ID 2001a)

- *Explanation of Significant Differences for the Record of Decision for the Test Area North Operable Unit 1-10* (DOE-ID 2003a)

- *Record of Decision Amendment for the V-Tanks (TSF-09 and TSF-18) and Explanation of Significant Differences for the PM-2A Tanks (TSF-26) and TSF-06, Area 10, at Test Area North, Operable Unit 1-10* (DOE-ID 2004a)

- *Explanation of Significant Differences for the Record of Decision for the Test Area North Operable Unit 1-10* (DOE-ID 2005a).

2.1.1 Operable Unit 1-10

The O&M activities at WAG 1 were originally described in the *Operations and Maintenance Plan for Test Area North, Operable Unit 1-10* (DOE-ID 2001b). Currently, O&M activities for OU 1-10 are decreasing as many remedial activities are being completed. The former and revised activities are detailed in this subsection and are summarized in Table 1. See Appendix A for the WAG 1 O&M inspection log and map.

Table 1. Annual operations and maintenance inspection activities for Operable Unit 1-10 at Waste Area Group 1.

Site	O&M Requirement	Action/Schedule	Revision 2006
TSF-03	Periodic subsidence/erosion inspections	Annual visual inspection of soil surface for subsidence, erosion, and animal intrusion	Remedy is complete at TSF-03. It is now a no-action site. Periodic inspection for native vegetation growth will be performed as a best-management practice only.
TSF-06 Area B soil contamination area south of the turntable	Periodic environmental monitoring	Annual radiological survey of site perimeter until first 5-year review	Contaminated soil was removed from the TSF-06 site during the remedial actions at the site; consequently, environmental monitoring has been discontinued.
	Periodic intrusion monitoring and subsidence/erosion inspections	Annual visual inspection of soil surface for subsidence, erosion, and animal intrusion	Annual visual inspection for growth of noxious weeds
TSF-07 disposal pond	Periodic environmental monitoring	Annual radiological survey of the site perimeter will be performed until the site is determined to no longer pose an unacceptable risk to human health and the environment.	No change
	Sampling for releasing land use restrictions.	Sampling in 2071	There is no change to the O&M requirement.
TSF-09 and TSF-18, the V-Tanks site	Periodic environmental monitoring	Annual radiological survey of site perimeter until first 5-year review	The annual radiological survey activity has been discontinued in accordance with the 5-year review.
	Periodic intrusion monitoring and subsidence/erosion inspections	Annual visual inspection of soil surface for subsidence, erosion, and animal intrusion	Annual visual inspection for growth of noxious weeds
TSF-26 PM-2A area	Periodic environmental monitoring	Annual radiological survey of site perimeter until first 5-year review	The annual radiological survey activity has been discontinued in accordance with the 5-year review.
	Periodic intrusion monitoring and subsidence/erosion inspections	Annual visual inspection of soil surface for subsidence, erosion, and animal intrusion	Annual visual inspection for growth of noxious weeds

Table 1. (continued).

Site	O&M Requirement	Action/Schedule	Revision 2006
WRRTF-01 burn pits	Periodic intrusion monitoring and subsidence/erosion inspections	Annual visual inspection of soil surface for subsidence, erosion, and animal intrusion	Annual visual inspection of native soil cover for subsidence, erosion, and animal intrusion
	Periodic inspection of native soil cover at WRRTF-01		Annual visual inspection for growth of native vegetation and annual inspection to ensure that the monuments are intact

O&M = operations and maintenance
ROD = Record of Decision
TSF = Technical Support Facility
WRRTF = Water Reactor Research Test Facility

2.1.1.1 Soil Cover Erosion, Subsidence, and Intrusion. The Technical Support Facility (TSF) -06 Area B, TSF-09, TSF-18, TSF-26, and Water Reactor Research Test Facility (WRRTF) -01 will be inspected annually. Visual inspection will identify areas of erosion and/or subsidence or animal intrusions. The areas exhibiting these characteristics will be documented, photographed, and repaired with additional soil to return them to the surrounding grade.

The TSF-03 remedy is complete; this is now a no-action site. All hazards have been removed, and the location qualifies for unrestricted use. Regrowth of native vegetation will be inspected as a best-management practice only and not as a requirement under CERCLA (42 USC § 9601 et seq.). The WRRTF-01 remedy also is complete, and the caps on Pits II and IV will be inspected annually for cover integrity.

2.1.1.2 Environmental Monitoring. Radiological surveys were formerly performed annually at TSF-06 Area B, TSF-07, TSF-09/18, and TSF-26 to monitor for windblown contamination. Results of these surveys were compared with the baseline survey obtained in 2000, and no evidence of windblown contamination was found. This activity has been discontinued following the 5-year review.

2.1.1.3 Native Vegetation Growth. The growth of the newly planted native vegetation will be inspected annually on completed remedial action sites until the vegetation is confirmed to be well established. Areas where the native vegetation is not growing will be reseeded, as necessary, to establish growth. Except on sites with native soil covers, when the native vegetation has been confirmed to be well established, further annual inspection will be discontinued.

2.1.1.4 Noxious Weed Growth. The growth of noxious weeds will be inspected annually on completed remedial action sites that were not reseeded with native vegetation. Areas where noxious weeds are present will be sprayed or tilled to control the growth of the noxious weeds.

2.1.2 Operable Unit 1-07B

The WAG 1 OU 1-07B O&M activities are addressed in the following documents:

- *In Situ Bioremediation Operations and Maintenance Plan for Test Area North, Operable Unit 1-07B* (DOE-ID 2004b)
- *Monitored Natural Attenuation Operations, Monitoring, and Maintenance Plan for Test Area North, Operable Unit 1-07B* (DOE-ID 2003b)

- *New Pump and Treat Facility Operations and Maintenance Plan for Test Area North Final Groundwater Remediation, Operable Unit 1-07B* (DOE-ID 2003c).

2.2 Waste Area Group 2, Reactor Technology Complex

The following decision documents apply to WAG 2, the Reactor Technology Complex (RTC) (formerly known as the Test Reactor Area [TRA]):

- *Final Record of Decision Test Reactor Area Operable Unit 2-13* (DOE-ID 1997b)

- *Explanation of Significant Differences to the Record of Decision for the Test Reactor Area Operable Unit 2-13* (DOE-ID 2000a).

The O&M activities at WAG 2 were previously described in the *Operations and Maintenance Plan for the Final Selected Remedies and Institutional Controls at Test Reactor Area, Operable Unit 2-13* (DOE-ID 2000b). Table 2 lists the inspection, monitoring, and maintenance requirements with schedules for WAG 2. The table indicates any revisions to these activities.

See Appendix B for the WAG 2 O&M inspection log and map.

Table 2. Operations and maintenance activities and schedule at Waste Area Group 2.

Site	O&M Requirement	Action/Schedule	Revision
TRA-03 warm waste pond	Periodic inspection of cover to ensure cover integrity and surface drainage away from covers	Annual visual inspection of soil cover integrity	There is no change to the O&M requirement.
		Annual inspection of the engineered cover for settling and erosion	There is no change to the O&M requirement.
		Annual assessment of surface water run-off	There is no change to the O&M requirement.
	Radiological surveys	Annual radiological survey around the perimeter	
TRA-06 chemical waste pond	Periodic inspection of cover to ensure cover integrity and surface drainage away from covers	Annual inspection of soil cover integrity	There is no change to the O&M requirement.
		Annual assessment of surface water run-off	There is no change to the O&M requirement.
		Annual inspection of vegetative cover	There is no change to the O&M requirement.

Table 2. (continued).

Site	O&M Requirement	Action/Schedule	Revision
TRA-13 sewage leach pond and TRA-13 soil contamination area	Periodic inspection of cover to ensure cover integrity and surface drainage away from covers	Annual inspection of soil cover integrity	There is no change to the O&M requirement.
		Annual assessment of surface water run-off	There is no change to the O&M requirement.
		Annual (in late summer) inspection of the vegetative cover	There is no change to the O&M requirement.
	Radiological surveys	Annual radiological survey over the covers	There is no change to the O&M requirement.
		Radiological survey around the perimeter	

O&M = operations and maintenance
TRA = Test Reactor Area

2.2.1 Inspection of Engineered Cover

The engineered barriers at TRA-03 are inspected annually. As the inspector walks the perimeter, he or she performs an annual visual inspection for subsidence in the covers. If subsidence has occurred, coarse gravel will be used to fill the voids of the affected area. This may or may not require moving riprap to access the area.

During a general walk-through of the covers, an annual visual inspection is performed for animal intrusion and subsidence in the covers. If subsidence or animal intrusion has occurred, the affected area will be filled with appropriate soil to bring the area up to the surrounding grade, as determined by visual approximation.

2.2.2 Inspection of Native Covers

Annual inspection of the native covers at TRA-06, TRA-13, and the surrounding soil contamination area is performed during the late summer and will continue annually until adequate growth of non-weed species is established and observed for 3 consecutive years, as a minimum. Qualitative determinations of non-growth or sparse growth areas will be made through comparative evaluations in undisturbed areas near the containment systems with consideration of the length of time since planting.

Qualitative information on surface erosion is collected during the annual inspection of the native soil covers. If soil movement—as evidenced by the accumulation of soil on the upslope side of plants, pedestalling of plants or rocks, or the formation of rills or gullies—is observed, it will be recorded with the extent of erosion noted. If rills and gullies are observed, appropriate soil will be added and compacted to bring the area up to the surrounding grade, as determined by visual approximation, and then seeded. Photographs will be taken as needed.

2.2.3 Radiological Monitoring

Surface radiological monitoring has been performed annually at the RTC to identify potential migration of contamination and to ensure that the existing remedy is protective for occupational exposure. The surveys are performed around the perimeter and on the surface of the covers at the TRA-13 and TRA-13 soil contamination area using an in situ high-purity germanium detector. The survey around the perimeter of TRA-03 is performed using a global positioning radiometric scanner. Results of the surveys are compared with previous annual surveys.

Following the 5-year review, the frequency of radiological monitoring at TRA-13 and the TRA-13 soil contamination area has been reduced from annually to once every 5 years. No change at TRA-03 was recommended.

2.3 Waste Area Group 3, Idaho Nuclear Technology and Engineering Center

The following decision documents apply to WAG 3, the Idaho Nuclear Technology and Engineering Center (INTEC):

- *Final Record of Decision Idaho Nuclear Technology and Engineering Center Operable Unit 3-13* (DOE-ID 1999b)

- *Explanation of Significant Differences for the Final Record of Decision for the Idaho Nuclear Technology and Engineering Center, Operable Unit 3-13* (DOE-ID 2004c).

These documents do not specify O&M activities. As remedial activities evolve at WAG 3, O&M activities will be reevaluated and included in future revisions of this document.

The two O&M plans listed below were prepared under WAG 3 OU 3-13:

- *ICDF Complex Operations and Maintenance Plan* (DOE-ID 2003d)

- *Operation and Maintenance Plan for INTEC Operable Unit 3-13, Group 1, Tank Farm Interim Action* (DOE-ID 2005b).

These two O&M plans are provided for reference, but the activities identified in them are not included in this plan.

The *ICDF Complex Operations and Maintenance Plan* (DOE-ID 2003d) discusses transportation and disposal of waste at the ICDF. These activities are performed by ICDF personnel and are outside of the scope of this plan. Inspection and maintenance of the barrier that will cap the ICDF in the future may be included in later versions of this plan.

The *Operation and Maintenance Plan for INTEC Operable Unit 3-13, Group 1, Tank Farm Interim Action* (DOE-ID 2005b) discusses the day-to-day operations. Facility operations personnel implement and perform the activities identified in that plan.

Appendix C is reserved for the future WAG 3 O&M inspection log and map.

2.4 Waste Area Group 4, Central Facilities Area

The following decision documents apply to WAG 4, Central Facilities Area (CFA):

- *Record of Decision Declaration for Central Facilities Area Landfills I, II, and III (Operable Unit 4-12), and No Action Sites (Operable Unit 4-03)* (INEL 1995a)
- *Final Comprehensive Record of Decision for Central Facilities Area Operable Unit 4-13* (DOE-ID 2000c)
- *Explanation of Significant Differences for the Record of Decision for the Central Facilities Area Operable Unit 4-13* (DOE-ID 2003e).

The WAG 4 O&M activities were originally addressed in the *Operations and Maintenance Plan for the Final Selected Remedies at Central Facilities Area, Operable Unit 4-13* (DOE-ID 2004d). The WAG 4 O&M activities and revisions are summarized in Table 3. The following subsections detail the activities.

See Appendix D for the WAG 4 O&M inspection log and map.

2.4.1 Soil Cover Erosion, Subsidence, and Intrusion

The soil covers at the three landfills and at the CFA-08 drainfield are inspected annually for erosion. Visual inspection is used to identify areas on the covers affected by erosion and/or subsidence. Specifically, inspectors look at areas of the covers that exhibit the following characteristics: (1) erosion rills in excess of 2 in. deep or 6 in. wide for a distance of more than 10 ft, (2) areas of the covers showing signs of ponding or localized subsidence in excess of 6 in., and (3) all animal intrusions into the top of the cover. The areas exhibiting these characteristics are documented, photographed, and repaired with additional soil to return them to the required grade. They are then reseeded. Contingency inspections also may be conducted as needed after severe rainstorms, floods, tornadoes, earthquakes, or vandalism. The frequency of the soil cover inspection will be evaluated during the 5-year review.

2.4.2 Topographic Survey

A topographic survey is conducted for 5-year reviews at the three landfill covers and at the rock armoring on the north end of Landfill II to check for subsidence in excess of 6 in. and 12 in., respectively. A 100- × 100-ft grid has been established at the three landfills, and a 30- × 30-ft grid has been established for the rock armoring on the north end of Landfill II. Areas of concern demonstrating excess subsidence are documented, and subsequent topographical surveys will be conducted annually for a minimum of 3 years. Continual movement or subsidence over a period of 3 years would indicate failure of the cover. If that occurs, the slopes will be evaluated to determine the cause of the movement. Evaluation of cover failure will consist of the following:

- Ascertaining the type of slope failure that occurred (circular slope failure, subsidence, block/sliding failure) based on visual inspection of the area
- Ascertaining the cause of the failure.

If a cover fails, DOE-ID will ascertain the nature and extent of repairs with concurrence from the DEQ and the EPA. The frequency of topographic surveys will be evaluated during the 5-year review.

Table 3. Summary of inspection schedule at Waste Area Group 4.

Site	O&M Requirement	Schedule/Action	Revisions
CFA-01 CFA Landfill I	Periodic topographical surveys and maintenance of the soil cover's slope and contours; inspection for animal intrusion, vegetative growth, and cover erosion to verify cover integrity and surface drainage away from the cover; and periodic inspection of soil monitoring equipment	Topographical survey conducted in conjunction with 5-year reviews, annual inspection of soil monitoring equipment, and annual inspection and maintenance of soil cover to verify and ensure cover integrity	There is no change to the O&M requirement.
CFA-02 CFA Landfill II	Periodic topographical surveys and maintenance of the soil cover's slope and contours; inspection for animal intrusion, vegetative growth, and cover erosion to verify integrity and surface drainage away from the cover; periodic inspection of soil monitoring equipment; and periodic inspection and corrective maintenance of rock armoring	Topographical survey conducted in conjunction with 5-year reviews, annual inspection of soil monitoring equipment, annual inspection and maintenance of soil cover to verify and ensure cover integrity, and annual inspection and maintenance of rock armoring	There is no change to the O&M requirement.
CFA-03 CFA Landfill III	Periodic topographical surveys and maintenance of the soil cover's slope and contours; inspection for animal intrusion, vegetative growth, and cover erosion to verify the cover integrity and surface drainage away from the cover; and periodic inspection of soil monitoring equipment	Topographical survey conducted in conjunction with 5-year reviews, annual inspection of soil monitoring equipment, and annual inspection and maintenance of the soil cover to verify and ensure cover integrity	Topographical survey in 2005, 2006, and 2007 in the area of subsidence noted in the 5-year review (2005)
CFA-08 Sewage Plant Drainfield	Periodic inspection and maintenance of soil cover slope; inspection for animal intrusion, vegetative growth, and cover erosion to verify cover integrity and surface drainage away from the cover; and periodic survey of radiation levels	Annual inspection and maintenance of the soil cover to verify and ensure cover integrity, survey of radiation levels in 2005, and survey of radiation levels in 2007 if determined necessary during the 5-year review in 2005	No change; a radiation survey will be performed in 2007.

CFA = Central Facilities Area
O&M = operations and maintenance

2.4.3 Soil Cover Vegetation

The vegetation on soil covers at the three CFA landfills and at the CFA-08 drainfield is inspected annually to ensure proper growth. Success of vegetation will be determined by comparing seeded areas with undisturbed areas in the vicinity of the cover, while factoring in length of time since seeding. Areas where seeding fails—as evidenced by lack of established perennial grass, invasion by weeds (primarily Russian thistle, wheatgrass, and tumble mustard), or encroachment of shrubs (sagebrush and rabbitbrush)—will be documented and photographed. Any area larger than 10 × 10 ft that exhibits seeding failure will be reseeded and fertilized. The reseeded areas will require follow-up inspections to ensure successful reseeding. The frequency of inspection of the vegetation on the covers will be evaluated during the 5-year review.

2.4.4 Rock Armor

The rock armor on the north end of CFA-02, Landfill II, is visually inspected annually to ensure that there are no signs of subsidence or erosion. Where rock has eroded (identified as erosion rills or rock movement) or where the rock surface has settled 12 in. below the design grade, the underlying soil will be repaired. The rock will be removed, additional soil will be placed on the slope, and the rock will be replaced. Follow-up inspections will be performed if repairs are required on the rock armor. The frequency of rock armor inspections will be evaluated during the 5-year review.

2.4.5 Radiological Monitoring at CFA-08

A radiological survey was performed at CFA-08 in 2005 in conjunction with the 5-year review. Future radiological surveys will be conducted during subsequent 5-year reviews if requested by the Agencies.

2.5 Waste Area Group 5, Auxiliary Reactor Area/Power Burst Facility/Stationary Low-Power Reactor No. 1

The following decision documents apply to WAG 5, Auxiliary Reactor Area (ARA)/Power Burst Facility (PBF)/Stationary Low-Power Reactor No. 1 (SL-1):

- *Record of Decision Power Burst Facility Auxiliary Reactor Area Operable Unit 5-12* (DOE-ID 2000d)

- *Record of Decision, Stationary Low-Power Reactor-1 and Boiling Water Reactor Experiment-I Burial Grounds (Operable Units 5-05 and 6-01), and 10 No Action Sites (Operable Units 5-01, 5-03, 5-04, and 5-11)* (DOE-ID 1996).

2.5.1 Stationary Low-Power Reactor No. 1

The *Stationary Low-Power Reactor-1 and Boiling Water Reactor Experiment-I Burial Grounds Engineered Barriers Project Operation and Maintenance Plan, Operable Units 5-05 and 6-01* (INEL 1997) originally detailed the O&M activities at the SL-1 and the Boiling Water Reactor Experiment I (BORAX-I) burial grounds. Table 4 summarizes the activities, including revisions, and the following subsections provide details.

Refer to Appendix E for suggested inspection forms and maps of the areas.

2.5.1.1 Riprap and Biotic Barrier. The engineered barriers are inspected annually with particular attention paid to settling of the barrier. Visual inspections will identify areas affected by erosion and/or subsidence. Areas on the top of the barriers showing signs of localized subsidence more that 1 ft deep will be repaired by the addition of riprap in the subsided area. Subsidence in depths of less than 1 ft would be difficult to measure, because the riprap layer is constructed of rock that is 1 to 2 ft in diameter.

Animal intrusions into the biotic barrier at SL-1 will be identified during annual inspections. Information will be recorded on the inspection forms found in Appendix E of this plan.

Table 4. Summary of inspection schedule at the SL-1 burial ground.

Site	O&M Requirement	Schedule/Action	Revisions
SL-1 burial ground	Periodic inspection of biotic barrier	Annual inspection for erosion and intrusion	There is no change to the O&M requirement.
	Periodic inspection of riprap	Annual inspection of cover for settling and erosion	There is no change to the O&M requirement.
	Radiological surveys	Annual radiological surveys at the perimeter of the covers	There is no change to the O&M requirement.

O&M = operations and maintenance
SL-1 = Stationary Low-Power Reactor No. 1

2.5.1.2 Revegetated Areas and Erosion. Engineered barriers are not revegetated, but adjacent areas that were disturbed during the 2004 remedial activities have been revegetated. The revegetated areas are monitored qualitatively during an annual inspection in late summer to ensure proper growth. Qualitative determinations of nongrowth areas or of sparse growth areas will be made in comparative evaluations of the growth in undisturbed areas near the burial grounds with consideration of the length of time since planting. Inspection of revegetated areas will continue until the next 5-year review, when the frequency of the inspections will be reevaluated.

Areas where seeding fails—as evidenced by lack of perennial grass establishment, invasion by weeds (primarily Russian thistle, wheatgrass, and tumble mustard), or encroachment of shrubs (sagebrush and rabbitbrush)—will be documented and photographed. At the time of the revegetated cover inspections, qualitative information on surface erosion will be collected in the revegetated zones. Observations of soil movement—as evidenced by the accumulation of soil on the upslope side of plants, pedestalling of plants or rocks, or the formation of rills or gullies—will be recorded. Photographs will be taken as needed.

2.5.2 Power Burst Facility and Auxiliary Reactor Area

The *Operations and Maintenance Plan for Power Burst Facility and Auxiliary Reactor Area, Operable Unit 5-12* (DOE-ID 2000e) originally described O&M requirements of PBF and ARA. Remedial activities are complete at PBF. No O&M activities are specified for PBF sites.

Significant remedial activities are complete at ARA. The activities involved ARA-01, ARA-02, ARA-06, ARA-12, ARA-16, ARA-23, and ARA-25. Changes to O&M requirements are noted in the *Remedial Action Report for the Operable Unit 5-12 Remedial Action* (DOE-ID 2005c). Refer to Table 5 for a listing of the O&M activities and environmental monitoring requirements, including revisions. Refer to Appendix E for inspection forms and maps of the area.

Table 5. Summary of the Operable Unit 5-12 environmental monitoring requirements.

Site	O&M Requirement	Schedule/Action	Revisions
ARA-01 ARA-I chemical evaporation pond	Heavy metal survey	5-year reviews for 100 years	Contaminants were removed during the remedial action for these sites; heavy metal surveys have been discontinued.
	Periodic inspection of revegetated areas	Annually until 5-year review	New
ARA-02 ARA-I sanitary waste system	Radiological survey of site perimeter	5-year reviews for 100 years	Contaminants were removed during the remedial action for this site; radiological surveys have been discontinued.
	Periodic inspection of revegetated areas	Annually until 5-year review	New
ARA-06 ARA-II SL-1 burial ground	Radiological survey of site perimeter	5-year reviews for 100 years	No change
	Periodic inspection of revegetated areas	Annually until 5-year review	New
ARA-12 ARA-III radioactive waste leach pond	Radiological survey of site perimeter and heavy metals survey of site soils	5-year reviews for 100 years	Contaminants were removed during the remedial action for this site; radiological surveys have been discontinued.
	Periodic inspection of revegetated areas	Annually until 5-year review	New
ARA-16 ARA-I radionuclide tank	Radiological survey of site perimeter	5-year reviews for 100 years	Contaminants were removed during the remedial action for this site; radiological surveys have been discontinued.
	Periodic inspection of revegetated areas	Annually until 5-year review	New

Table 5. (continued).

Site	O&M Requirement	Schedule/Action	Revisions
ARA-23 ARA-II radiologically contaminated surface soils	Radiological survey of site perimeter	5-year reviews for 100 years	No change
	Periodic inspection of revegetated areas	Annually until 5-year review	New
ARA-25 ARA-I soils beneath the ARA-626 hot cells	Radiological survey of site perimeter and heavy metals survey of site soils	5-year reviews for 100 years	Contaminants were removed during the remedial action for this site; the heavy metals survey of site soil has been discontinued. Radiological survey of the site perimeter will continue.
	Periodic inspection of revegetated areas	Annually until 5-year review	New

ARA = Auxiliary Reactor Area
O&M = operations and maintenance
SL-1 = Stationary Low-Power Reactor No. 1

2.6 Waste Area Group 6/10, Boiling Water Reactor Experiment/Sitewide Concerns

The following decision document applies to WAG 6/10:

- *Record of Decision Experimental Breeder Reactor-I/Boiling Water Reactor Experiment Area and Miscellaneous Sites Operable Units 6-05 and 10-04* (DOE-ID 2002).

The *Stationary Low-Power Reactor-1 and Boiling Water Reactor Experiment-I Burial Grounds Engineered Barriers Project Operation and Maintenance Plan, Operable Units 5-05 and 6-01* (INEL 1997) formerly detailed the O&M activities at the BORAX-I burial grounds. Table 6 summarizes the activities, with revisions, and the following subsections provide details. Refer to Sections 2.5.1.1 and 2.5.1.2 for details about the inspection activities for the SL-1 burial grounds.

Groundwater monitoring activities associated with WAG 10 are performed as part of the Surveillance and Monitoring Program and are not discussed in this plan.

The O&M activities at OU 10-04 involve collection and disposal of unexploded ordnance or explosive fragments that pose a threat to human health and the environment. These hazards are uncovered during routine activities and are not a scheduled, periodic activity. Therefore, no annual O&M inspections are required at ordnance sites. However, the annual O&M report will make note of any maintenance activities. The *Operations and Maintenance Plan for Operable Units 6-05 and 10-04, Phase I* (DOE-ID 2004e) also discusses long-term monitoring requirements for ecological risk at the INL Site.

Table 6. Summary of inspection schedule at the BORAX-I burial grounds.

Site	O&M Requirement	Action/Schedule	Revisions
BORAX-I burial grounds	Periodic inspection of biotic barrier	Annual inspection for erosion and intrusion	There is no change to the O&M requirement.
	Periodic inspection of riprap	Annual inspection of cover for settling and erosion	There is no change to the O&M requirement.
	Radiological surveys	Annual radiological surveys at the perimeter of the covers	There is no change to the O&M requirement.

BORAX-I = Boiling Water Reactor Experiment I
O&M = operations and maintenance

The ecological monitoring and reporting personnel in the Long-Term Ecological Monitoring Program conduct activities for WAG 10 in accordance with the requirements in the *Long-Term Ecological Monitoring Plan for the Idaho National Engineering and Environmental Laboratory* (INEEL 2004a). Consequently, ecological monitoring activities are excluded from this document.

Refer to Appendix F for suggested inspection forms and maps of the BORAX area.

2.7 Waste Area Group 7, Radioactive Waste Management Complex

The following decision documents apply to WAG 7, the Radioactive Waste Management Complex (RWMC):

- *Record of Decision Declaration for Pad A at the Radioactive Waste Management Complex Subsurface Disposal Area* (DOE-ID 1994a)
- *Record of Decision Declaration for Organic Contamination in the Vadose Zone, Operable Unit 7-08* (DOE-ID 1994b)
- *Record of Decision Declaration for Pit 9 at the Radioactive Waste Management Complex Subsurface Disposal Area* (DOE-ID 1993)
- *Pit 9 Interim Action Record of Decision at the Radioactive Waste Management Complex* (DOE-ID 1995b)
- *Explanation of Significant Differences for the Pit 9 Interim Action Record of Decision at the Radioactive Waste Management Complex* (DOE-ID 1995c)
- "Two-Year Review, Idaho National Engineering Laboratory, Pad A, Subsurface Disposal Area, Operable Unit 7-12" (Wilkening 1997).

2.7.1 Pad A

The O&M activities at Pad A were originally performed under guidance in the *Remedial Action Report Pad A Limited Action Operable Unit 7-12* (INEL 1995b, Appendix N). That document was revised and renamed the *Operations and Maintenance Plan for the Pad A Limited Action Operable Unit 7-12 at the Radioactive Waste Management Complex* (ICP 2005). Refer to Table 7 for a summary of O&M activities at Pad A, including the revisions. The subsections that follow detail the revised maintenance activities required at Pad A.

Refer to Appendix G for suggested inspection log forms and a map of Pad A at the Subsurface Disposal Area (SDA) within WAG 7.

2.7.1.1 Vegetative Cover. Quarterly inspection and corrective maintenance of the vegetative cover will include the following:

- Inspection of non-growth areas
- Inspection and maintenance of sparse growth areas or areas that have degraded
- Maintenance of weeds and shrub encroachment.

2.7.1.2 Soil Cover. Quarterly inspection and corrective maintenance of the soil cover will include the following:

- Inspection for signs of erosion and/or subsidence areas
- Inspection for signs of animal intrusion into the soil cover
- Surveying to ascertain slope movement
- Inspection for signs of ponding or localized subsidence
- Maintenance to repair areas of animal intrusion.

2.7.1.3 Rock Armor. Quarterly inspection and corrective maintenance of the rock armoring will include the following:

- Inspection of rock-armored slopes
- Inspection for weed encroachment
- Inspection for possible signs of subsidence and/or erosion
- Maintenance to repair any problem areas.

2.7.1.4 Lysimeter Sampling. Annual sampling of the Pad A lysimeter wells will be discontinued under OU 7-12 and will be incorporated into the overall WAG 7 monitoring under OU 7-13/14. Monitoring and reporting by OU 7-13/14 will involve the following:

- Collecting and analyzing lysimeter well samples based on priorities established by OU 7-13/14
- Sending the sampling results to the DOE-ID, the DEQ, and the EPA by way of the WAG 7 annual monitoring report prepared by OU 7-13/14.

The monitoring frequencies outlined in this plan are summarized in Table 7.

Refer to Appendix G of this document for a map of Pad A at the SDA and for a suggested inspection form.

Table 7. Operations and maintenance activities and schedule at Pad A.

Item	Activity	Description	Frequency	Revisions
1	Perform lysimeter sampling by the WAG 7 organization.	Lysimeter vadose zone samples are collected and analyzed for nitrates. This task is to be completed a minimum of once a year in accordance with the *Record of Decision Declaration for Pad A at the Radioactive Waste Management Complex Subsurface Disposal Area* (DOE-ID 1994a). Because of the limited sampling volumes, nitrates will be the number one priority for the spring sampling event.	Annually and semiannually with the results being sent to the DOE-ID, EPA, and DEQ	There is no change to the O&M requirement.
2	Inspect vegetative cover, soil cover, and rock armor.	Vegetative cover, soil cover, and rock armor are inspected monthly, including winter months (when feasible). Monthly inspection results are retained in the Long-term Stewardship Pad A files and a copy sent to the Administrative Record and Document Control.	Ongoing (monthly). Requirements will be evaluated during the 5-year review.[a]	There is no change to the O&M requirement.
3	Evaluate vegetative cover, soil cover, and rock armor monitoring requirement.	Following the 5-year monitoring period,[a] the Long-Term Stewardship organization along with the EPA, DEQ, and DOE-ID will determine whether the monitoring frequency can be reduced. A digital topographic survey or Global Positioning System survey of the cover has been conducted during the summers of 2001, 2002, and 2004.	Requirements will be evaluated during the 5-year review.[a]	There is no change to the O&M requirement.
4	Report inspection results.	The Long-Term Stewardship organization will report the results of the inspection and maintenance activities to DOE-ID on a monthly basis. At the completion of the independent inspection (performed in late summer), the results and all monthly inspection results for that fiscal year will be sent to the DOE-ID, the DEQ, and the EPA.	Ongoing (monthly and annually). Requirement will be evaluated during the 5-year review.[a]	There is no change to the O&M requirement.
5	Sample the Perched Water Monitoring Well USGS-92 for nitrates.	The USGS will sample semiannually for nitrates under the direction of the WAG 7 organization.	Ongoing. Requirement will be evaluated during the 5-year review.[a]	There is no change to the O&M requirement.

a. The 2-year review was performed in 1997. A 5-year review was performed in 2005. The next 5-year review is scheduled for 2010.

DEQ = [Idaho] Department of Environmental Quality
DOE-ID = U.S. Department of Energy Idaho Operations Office
EPA = U.S. Environmental Protection Agency
O&M = operations and maintenance
USGS = United States Geological Survey
WAG = waste area group

2.7.2 Organic Contamination in the Vadose Zone

The following document details the O&M activities related to the organic contamination in the vadose zone:

- *Operations and Maintenance Plan for the OU 7-08 Organic Contamination in the Vadose Zone Project* (INEEL 2004b).

The remedial activity at OU 7-08 is ongoing, and the tasks detailed in the document above pertain to day-to-day operations. When the remedy is complete, the nature of O&M activities will be reevaluated and included in future revisions of this plan.

2.7.3 Pit 9

The remedial activity at Pit 9 is ongoing. When the remedy is complete, the nature of O&M activities will be reevaluated and included in future revisions of this plan.

2.8 Waste Area Group 8, Naval Reactors Facility

The Naval Reactors Facility is outside of the control of DOE-ID as of January 2006; therefore, O&M activities at WAG 8 are not covered in this report.

2.9 Waste Area Group 9, Materials and Fuels Complex

At the Materials and Fuel Complex, formerly called Argonne National Laboratory-West, O&M activities include monitoring the liquid level in ANL-04, the sanitary sewage lagoon. This activity is performed and reported as part of the routine maintenance of an operational facility. When the site becomes inactive, the Long-Term Stewardship organization may assume responsibility for this activity.

3. OPERATIONS AND MAINTENANCE REPORTING

Data and results from annual O&M activities (including inspections, radiological monitoring, maintenance, and repairs) are compiled and addressed in one annual sitewide report. The report documents the scheduled inspection, follow-up inspections, contingency inspections, and maintenance activities (as needed). Any identified deficiencies and completed corrections are noted in the annual report. In addition, a timeframe for correcting identified deficiencies that have not been completed is presented in the annual report. Specific inspection report forms and photographs are filed in the Long-Term Stewardship files and in EDMS.

Conducting and reporting of routine operational activities related to organic contamination in the vadose zone (Section 2.7.2), the tank farm interim action, and ICDF (Section 2.3) are performed by the respective projects and excluded from the annual O&M report. In addition, requirements for groundwater monitoring and reporting and for environmental monitoring and reporting are excluded from this report and will not be included in the annual O&M report.

The information contained in the annual O&M report is used in the 5-year review and other reports. Consequently, to facilitate the reporting and review process, the annual O&M report is reviewed by the Agencies on a 30-day schedule.

Refer to Appendix H for a list of sites that will be inspected annually to assess the growth of newly planted native vegetation.

4. REFERENCES

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Appendix A

Waste Area Group 1 Operations and Maintenance Inspection Log and Map

Waste Area Group 1 Operations and Maintenance Inspection Log and Map

Inspection Activity at WAG 1	TSF-06 Area B	TSF-26	TSF-09/18	WRRTF-01 Pits II and IV	Comments/Recommended Repair
Vegetative Cover					
1. Inspect for non-growth/sparse growth/weeds.					
Soil Cover					
1. Inspect for erosion areas/animal intrusion.					
2. Inspect for subsidence areas or slope movement.					
General Condition of Site					
1. Inspect for erosion areas/animal intrusion.					
2. Inspect for subsidence areas.					

Comments:
Note: TSF-03 is no longer a CERCLA site. The Idaho Cleanup Project revegetation coordinator will monitor revegetation annually. Contact 526-9296.
Note: Environmental monitoring at WAG 1 for windblown contamination has been discontinued following the 5-year review.

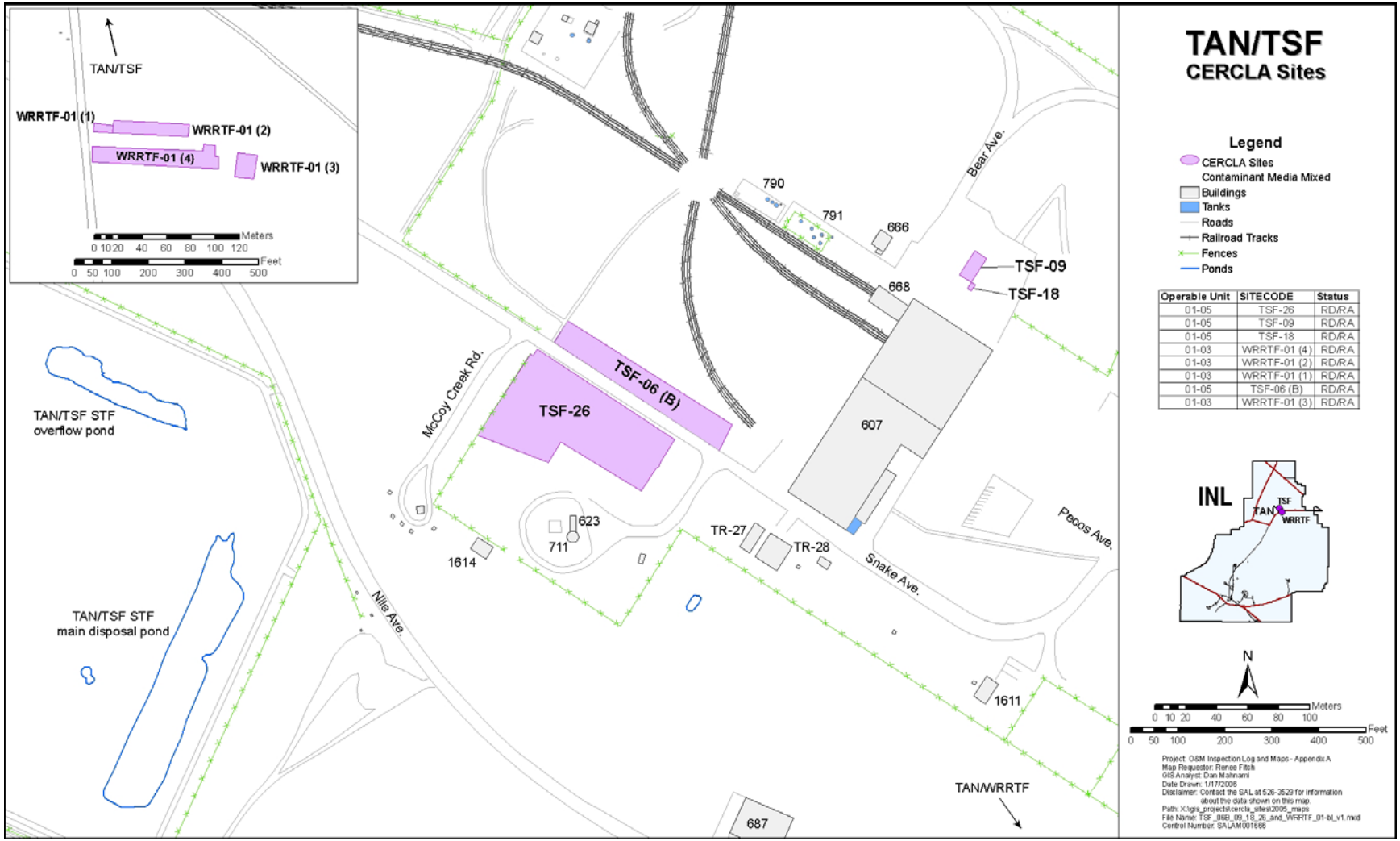

Figure A-1. Map of Waste Area Group 1 Comprehensive Environmental Response, Compensation, and Liability Act sites.

Appendix B

Waste Area Group 2 Operations and Maintenance Inspection Log and Map

Waste Area Group 2 Operations and Maintenance Inspection Log and Map

O&M Inspection Activity at TRA	TRA-03	TRA-06	TRA-13	TRA-13 SCA	Comments/Recommended Repair
Revegetated Areas					
1. Inspect for non-growth areas.					
2. Inspect for non-sparse growth areas.					
3. Inspect for weed encroachment.					
Native Soil Cover					
1. Inspect for erosion areas/animal intrusion.	**N/A**				
2. Inspect for subsidence areas or slope movement.	**N/A**				
3. Conduct topographical survey.	**N/A**				
Perimeter of Radiological Survey					
1. Perform perimeter radiological survey.	**N/A**		**N/A**	**N/A**	
Radiological Survey of Surface of Soil Cover					
1. Perform surface radiological survey.		**N/A**	**5-year review only**		
Riprap Barrier					
1. Inspect for erosion areas.		**N/A**	**N/A**	**N/A**	
2. Inspect for subsidence areas.		**N/A**	**N/A**	**N/A**	
3. Inspect for biological intrusion.		**N/A**	**N/A**	**N/A**	
4. Inspect for effectiveness of surface water run-off.		**N/A**	**N/A**	**N/A**	

Additional Comments or Notes:

TRA-03 is the warm waste pond. Perimeter is vegetated. Cover is riprap.
TRA-06 is the chemical waste pond.
TRA-13 is the sewage leach ponds.
TRA-13 SCA is the soil contamination area surrounding the leach ponds.

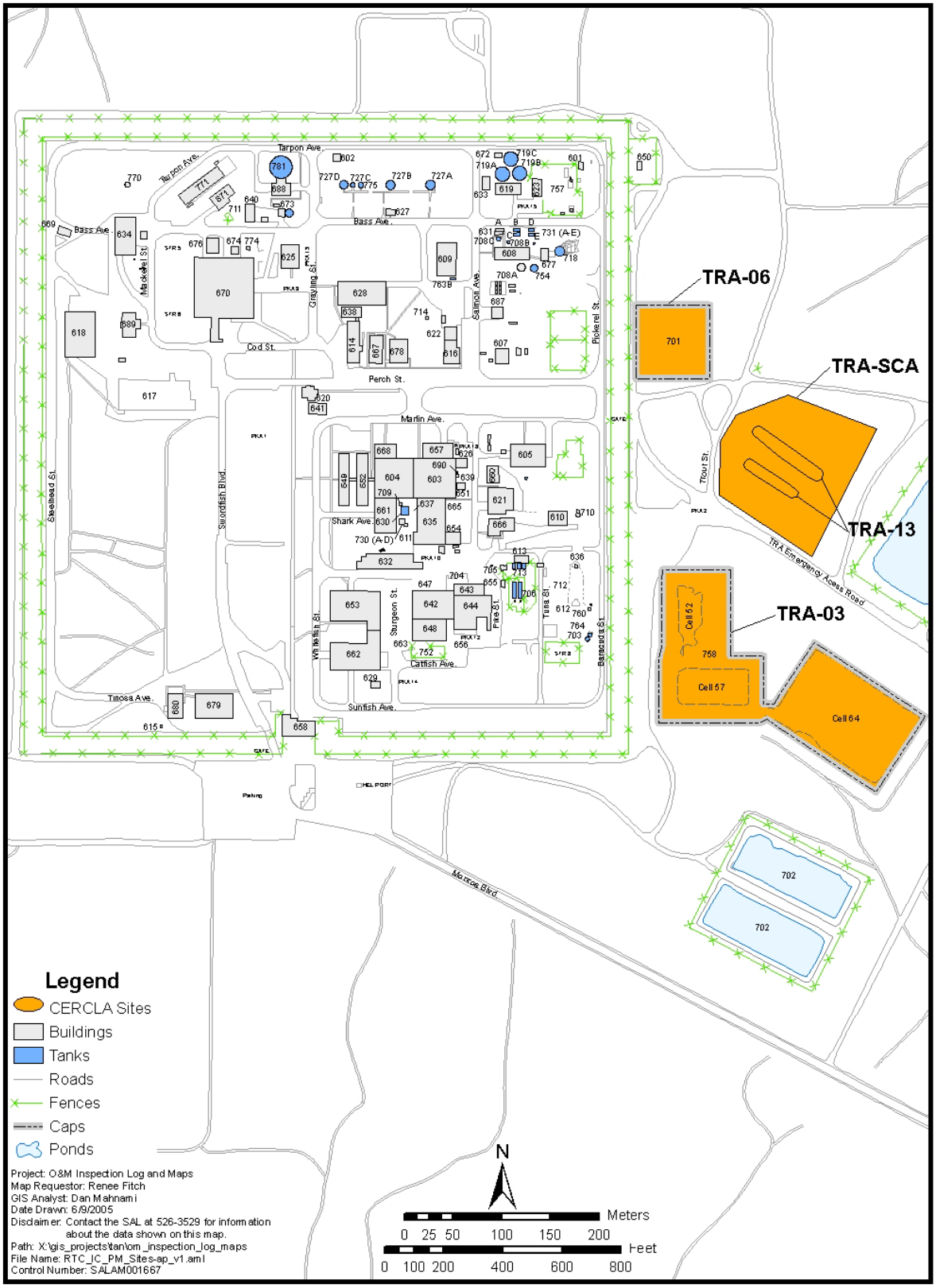

Figure B-1. Map of Waste Area Group 2 Comprehensive Environmental Response, Compensation, and Liability Act sites.

Appendix C

Waste Area Group 3 Operations and Maintenance Inspection Log and Map

Appendix C

Waste Area Group 3 Operations and Maintenance Inspection Log and Map

This appendix is intentionally left empty. Future operations and maintenance activities at the Idaho Nuclear Technology and Engineering Center will be placed here.

Appendix D

Waste Area Group 4 Operations and Maintenance Inspection Log and Map

Waste Area Group 4 Operations and Maintenance Inspection Log and Map

Inspection Activity at Landfills	CFA-01	CFA-02	CFA-03	Comments/Recommended Repair
Vegetative Cover				
1. Inspect for non-growth/sparse growth/weeds.				
Soil Cover				
1. Inspect for erosion areas/animal intrusion.				
2. Inspect for subsidence areas or slope movement.				
3. Conduct topographical survey.				
Time-Domain Reflectometer (TDR)				
1. Inspect cabinet interior for unusual dirt or debris.				
2. Inspect exterior and interior of cabinet for deterioration and presence of moisture or water.				
3. Inspect solar collector barrel for condition/function.				
4. Inspect and verify presence of guard post and/or impingement posts.				
Soil Gas Wells and Neutron Probe Access Tubes (NPATs)				
1. Inspect for integrity/cleanliness.				
3. Inspect rust on cover and well casing damage.				
4. Inspect guard posts around well cover.				
Rock Armor				
1. Inspect to verify no more than 12 in. of subsidence of rock armor.	**N/A**		**N/A**	
2. Conduct topographical survey.	During 5-year review		SEE NOTE	

Additional Comments or Notes:

NOTE: Topographical survey is required in 2006 at CFA-03 for the area of subsidence reported in 2004 only.

Waste Area Group 4 Operations and Maintenance Inspection Log – continued

O&M Inspection	CFA-08	Comments/Recommendations
1. Document no excavations or drilling.		
2. Inspect vegetation for sparse growth.		
3. Inspect vegetation for weed encroachment.		
4. Inspect vegetation for non-growth.		
5. Inspect for erosion.		
6. Inspect for subsidence.		
7. Inspect for animal intrusion.		
8. Inspect permanent markers.		
9. Conduct radiological survey.		**5-year review only**

Additional Comments or Notes:

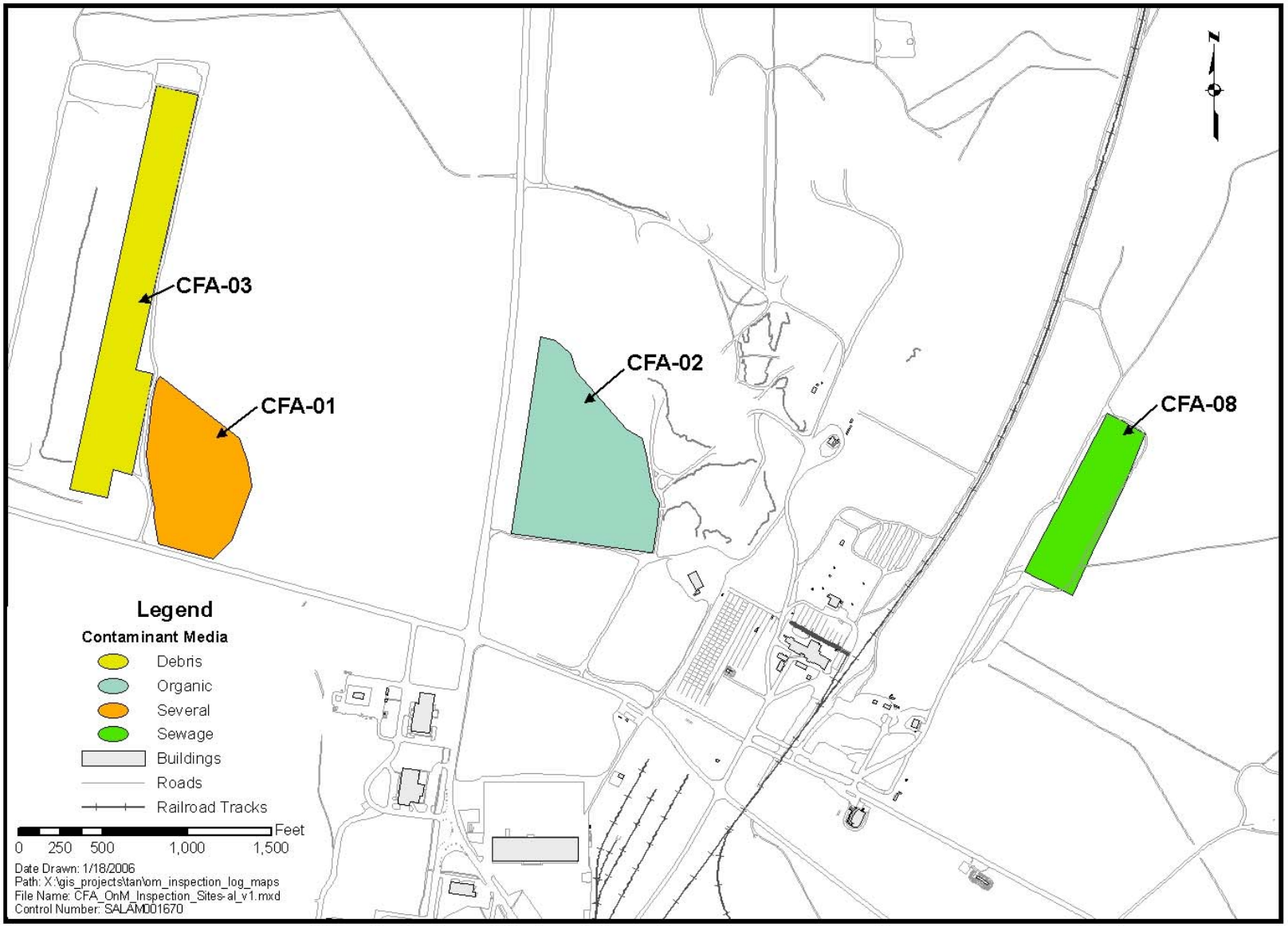

Figure D-1. Map of Waste Area Group 4 operations and maintenance inspection sites.

Appendix E

Waste Area Group 5 Operations and Maintenance Inspection Log and Map

Waste Area Group 5 Operations and Maintenance Inspection Log and Map

Inspection Activity at ARA and PBF	ARA-01	ARA-02	ARA-06	ARA-12	ARA-16	ARA-23	ARA-25
Revegetated Areas							
1. Inspect for intrusion.							
2. Inspect vegetative cover.							
Environmental Monitoring							
1. Radiological survey of site perimeter at 5-year review.	**N/A**	**N/A**		**N/A**	**N/A**	**N/A**	**N/A**

O&M Inspection Activity at SL-1	SL-1 Burial Ground	Comments/Recommended Repair
Biotic Barrier		
1. Inspect for erosion and intrusion.		
2. Inspect cover for settling and erosion.		
Riprap Barrier		
1. Inspect for erosion and intrusion.		
2. Inspect cover for settling and erosion.		
Perimeter of Radiological Survey		
1. Perform perimeter radiological survey.		

Comment or Notes:
Annual monitoring for heavy metals at ARA has been discontinued. Radiological monitoring at ARA-06 is to be performed during the 5-year review only.
There are no O&M activities at PBF.

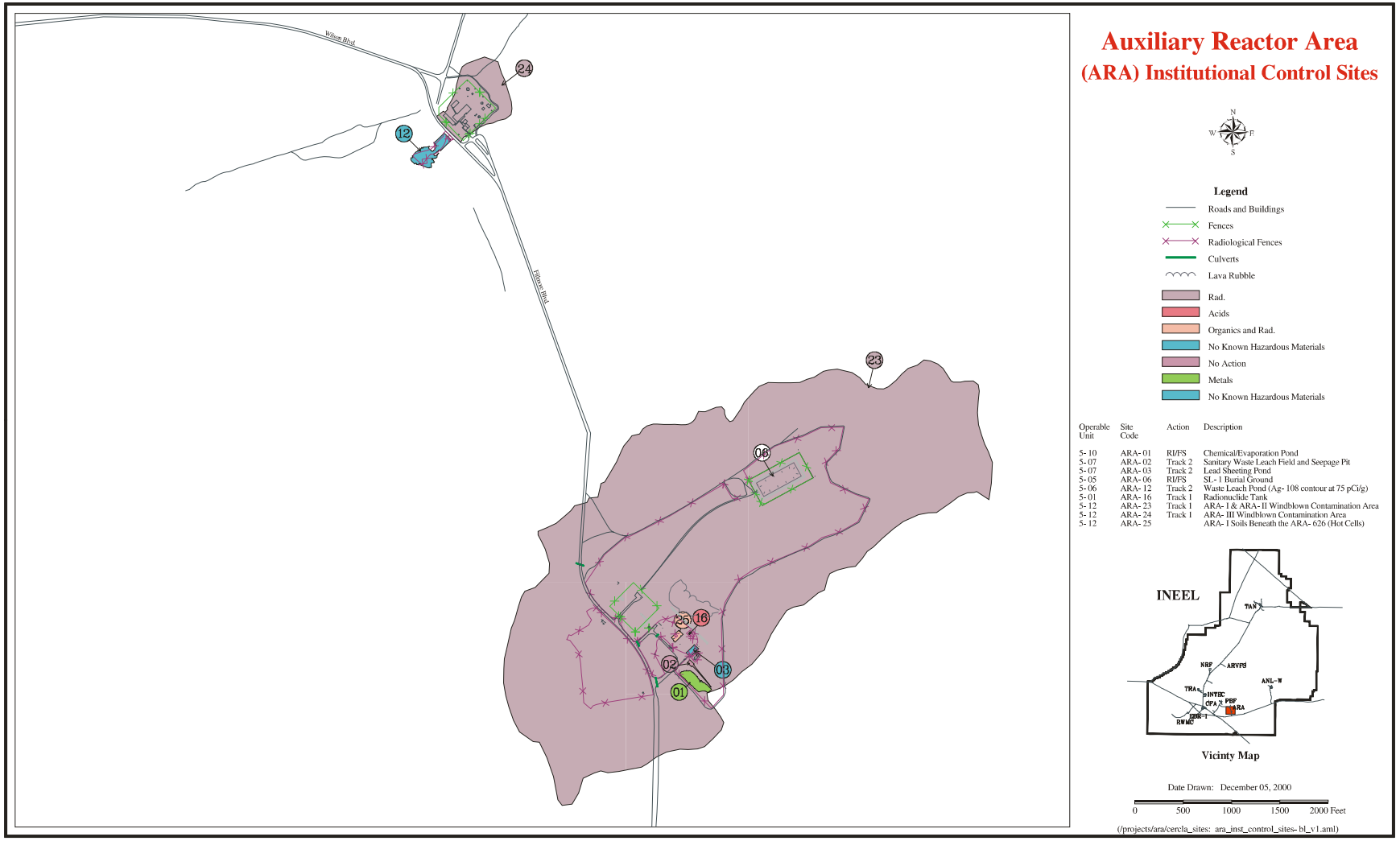

Figure E-1. Map of ARA and SL-1.

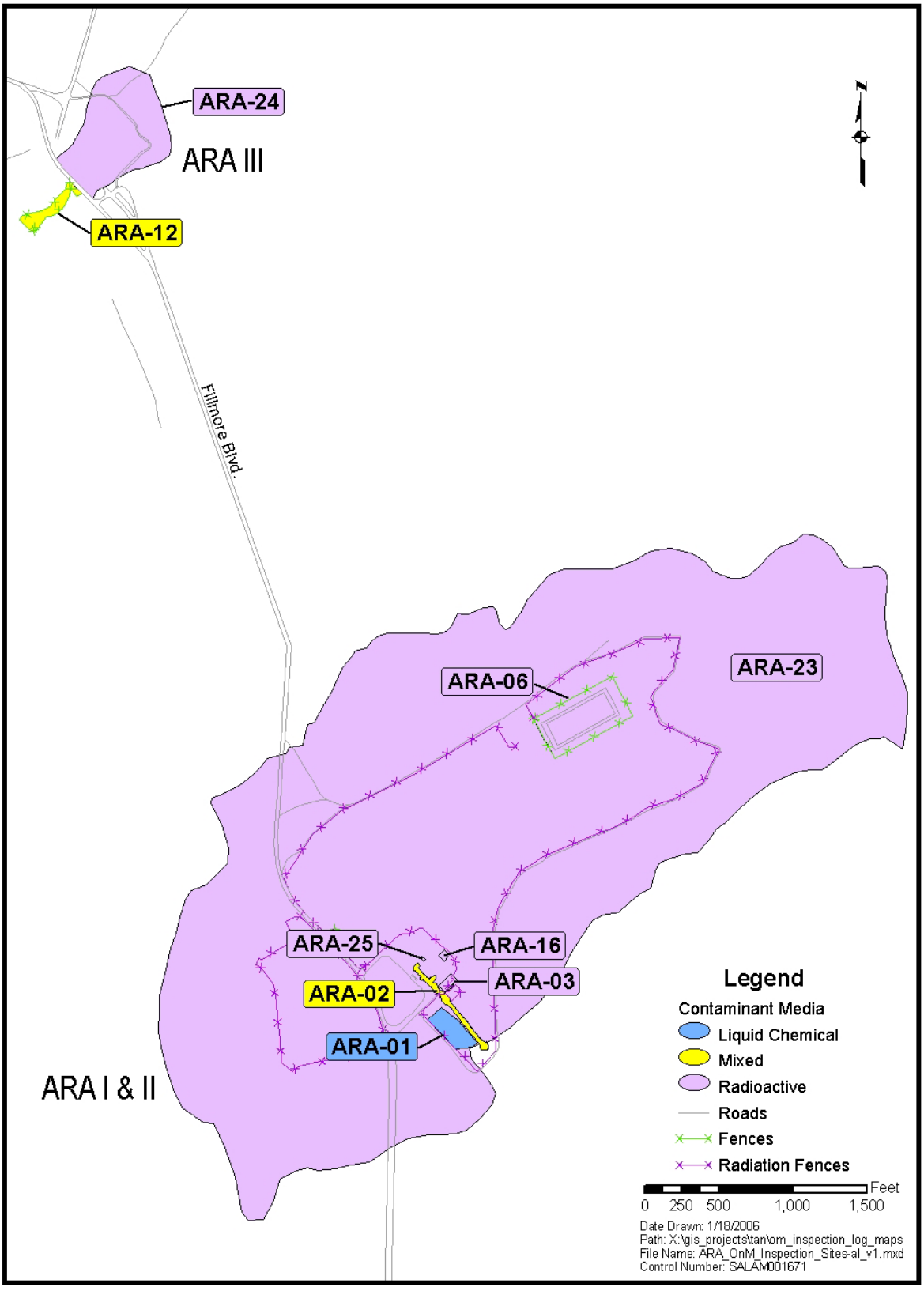

Figure E-2. Map of the Auxiliary Reactor Area.

Appendix F

Waste Area Group 6/10 Operations and Maintenance Inspection Log and Map

Waste Area Group 6/10 Operations and Maintenance Inspection Log and Map

O&M Inspection Activity at BORAX	BORAX Burial Ground	Comments/Recommended Repair
Biotic Barrier		
1. Inspect for erosion and intrusion.		
2. Inspect cover for settling and erosion.		
Riprap Barrier		
1. Inspect for erosion and intrusion.		
2. Inspect cover for settling and erosion.		
Perimeter of Radiological Survey		
1. Perform perimeter radiological survey.		

Comment or Notes:

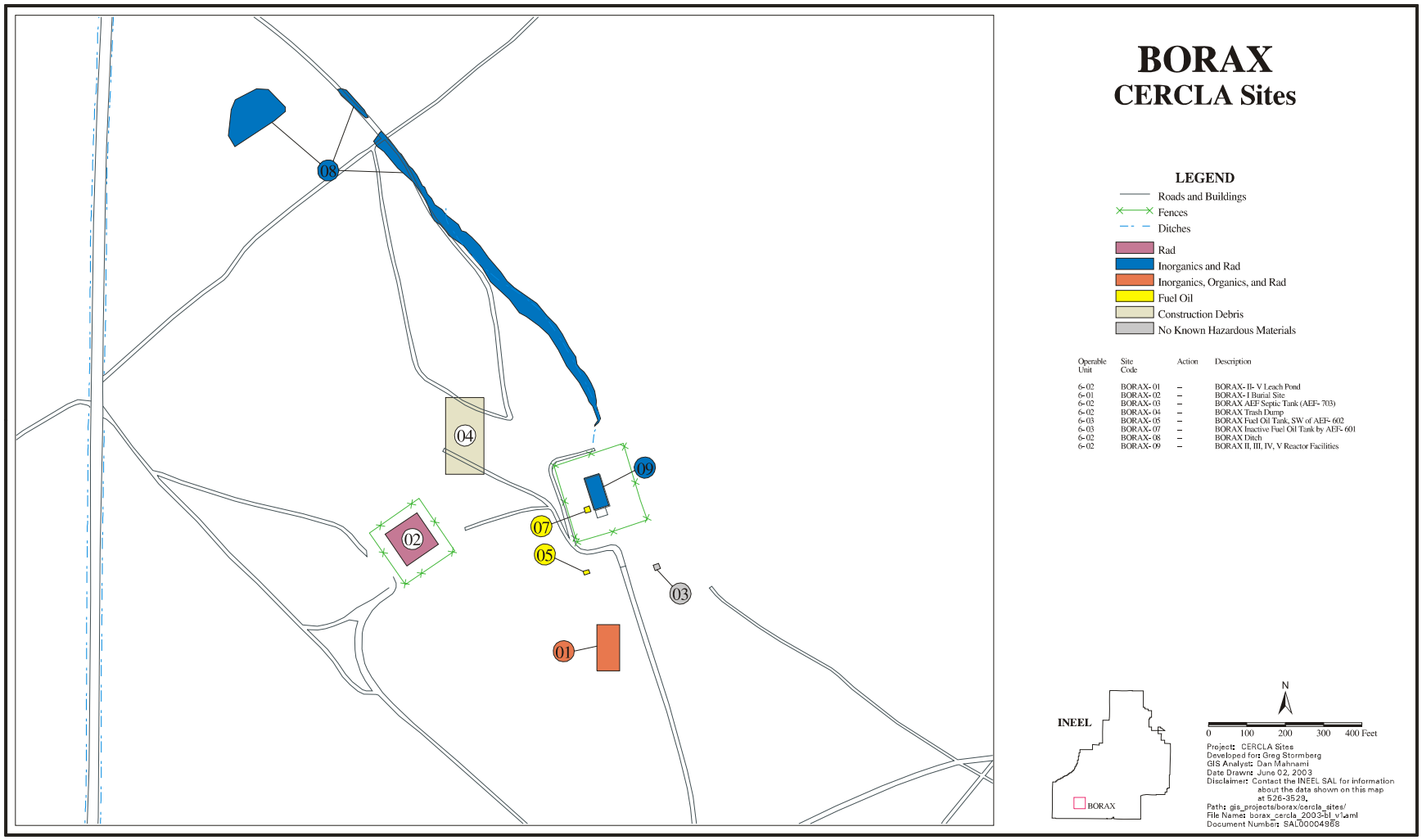

Figure F-1. Map of the Boiling Water Reactor Experiment.

Appendix G

Waste Area Group 7 Operations and Maintenance Inspection Log and Map

Waste Area Group 7 Operations and Maintenance Inspection Log and Map

Date of Inspection: _____

Inspection Activity	Status[a]	Comments, Recommendations, and Location of Concern
Vegetative Cover 1. Inspect for non-growth areas (larger than 10- × 10-ft area).		
2. Inspect for sparse growth areas or areas that have degraded month to month.		
3. Inspect for encroachment of weeds or shrubs.		
Soil Cover 1. Inspect for erosion and/or subsidence areas in excess of 3 in. deep or 6 in. wide.		
2. Inspect for signs of ponding or localized subsidence.		
3. Inspect for any animal intrusion into the soil cover.		
Rock Armor 1. Inspect to verify a minimum of 12 in. of rock armor.		
2. Inspect for weed encroachment.		
3. Inspect for possible signs of subsidence and/or erosion.		
4. Inspect for places that need additional rock armor.		
NOTE: Lysimeter sampling and maintenance are performed by the WAG 7 organization. a. Status is satisfactory (S), unsatisfactory (U), or not inspected (NI).		
Additional Comments:		
Inspector name:		
Inspector signature:		

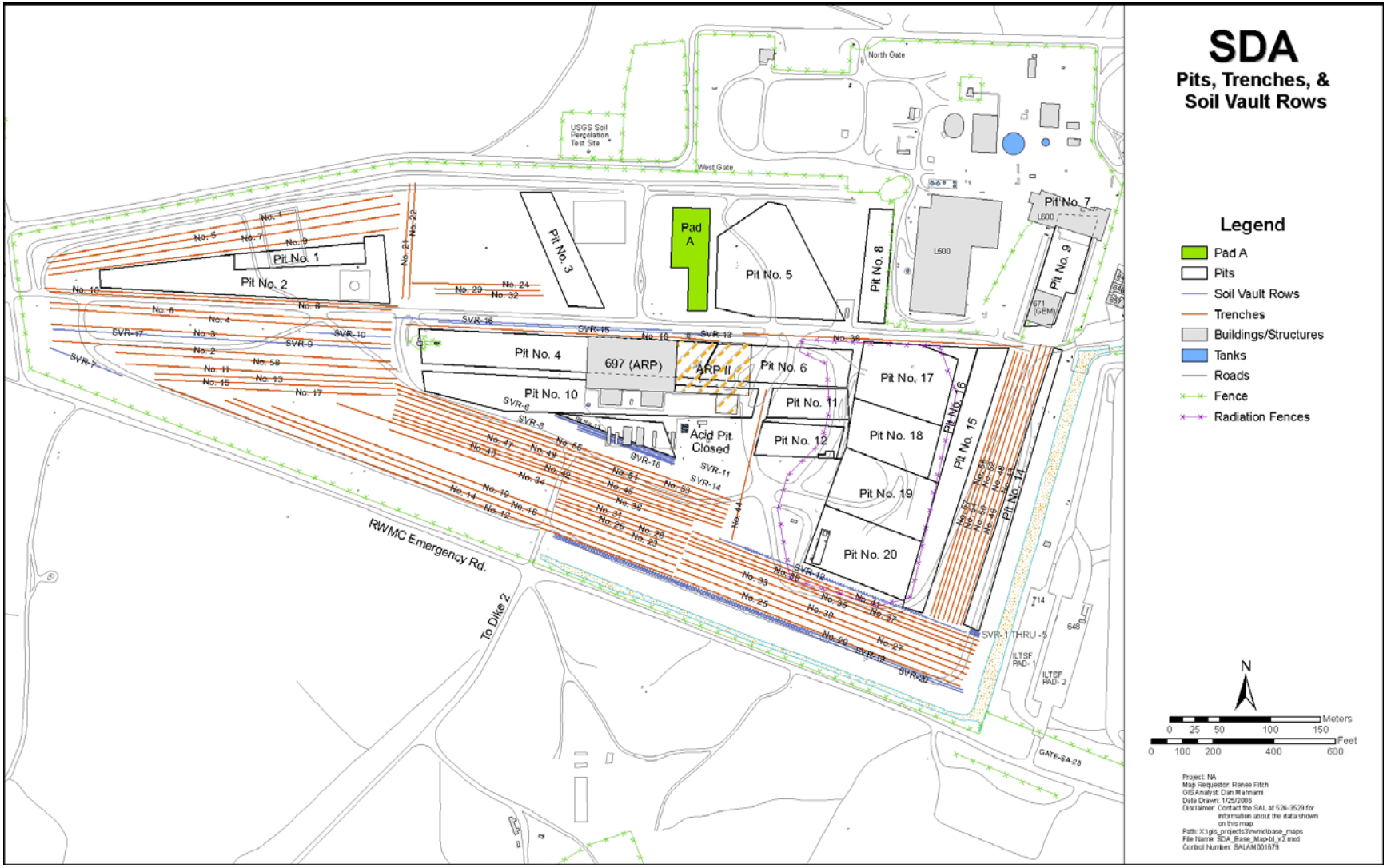

Figure G-1. Map showing the location of Pad A at the Subsurface Disposal Area.

Appendix H

Vegetation Assessment Sites

Appendix H

Vegetation Assessment Sites

The following list identifies the sites that will be inspected annually to assess the growth of newly planted native vegetation. Vegetation assessments will be continued until vegetation is confirmed to be established. Areas where the native vegetation is not growing will be reseeded as necessary to establish growth.

- TANT-MON-A-006
- TANT-MON-A-008
- TANT-MON-A-009
- TANT-MON-A-048
- TANT-MON-A-051
- TANT-MON-A-052
- TANT-MON-A-054
- TANT-MON-A-055
- TANT-MON-A-056
- TANT-MON-A-057
- TANT-MON-A-058
- TSF-03 former Burn Pit
- Initial Engine Test Facility
- ARVFS
- Lincoln Blvd. Borrow Source site (for CFA-08) (Lincoln Blvd. Site)
- CFA Fire Station II Site (west side)
- RTC (formerly TRA) North Storage Area (RTC OU 10-06 radiological soil contamination)
- TRA-13 OU 2-13 remedial action (RTC sewage leach pond cap)
- CFA-08 Sewage Plant, septic tank, and drainfield (CFA Sewage Treatment Plant)
- CFA-639/678 bunker (CFA bunker)
- Well CFA-MON-A-001 (CFA-MON-1)
- Well CFA-MON-A-002 (CFA-MON-2)
- Well CFA-MON-A-003 (CFA-MON-3)
- CFA-04 Pond Remedial Investigation/Feasibility Study (CFA-04 pond) Remediation
- Well PBF-MON-A-004 (PBF inside Well 4)
- ARA-13 and entire ARA-III graveled area (ARA-III site)

- ARA-12 (ARA-III radiological site)
- ARA-08 & ARA-07 (ARA-II north & south radiological sites)
- ARA-16/25 & ARA-02 (ARA-I east & south radiological sites)
- Security Training Facility
- EBR-03 (EBR-I outside fence)
- BORAX-V revegetation (outside fence)
- Large-scale infiltration test (infiltration basin).